

# Kerbside Recycling – Experiences from authorities receiving funding from the National Waste Minimisation and Recycling Fund

Appendix I: Basildon District Council

# Basildon District Council

## Introduction

Basildon District Council (BDC) received Round 2 funding to introduce a co-mingled dry recyclables collection to 12,000 properties. Round 2 funding covered 100% of the purchase of boxes (for 6,000 properties), the operational costs to run the collection for 7 months (Sept 03 – March 04), promotion and monitoring. In 2002/03 its BVPI 82a was 10.29% and 82b was 7.7%, making a combined rate of 17.99%. These were achieved through a range of different schemes. In 2003/04 its combined BVPI was 18.86% (see below for split), also achieved through a combination of different collections.

This report describes the detail of the collection and its performance together with a discussion of the lessons learnt in implementing the collection.

## Description of the collections

### Recycling and refuse collections before the Round 2 funding

BDC comprises approximately 72,000 households. It has a diverse population (but a high number of properties classified as ACORN 4&5.) BDC was created following the construction of Basildon New Town. It has two other main towns, Billericay and Wickford. Refuse is collected weekly in sacks.

Since 1996 most residents (96%) have been provided with a fortnightly kerbside collection of newspapers and magazines using disposable bags.

In 2001 a kerbside collection of garden waste was introduced to 30,000 properties. Of these, 1,400 were provided with 240L wheeled bins as a trial and the remainder were given biodegradable sacks.

A fortnightly glass collection commenced in June 2003 serving 14,000 properties. Residents were provided with a 55L box that was collected by tipping the mixed glass into a flat back vehicle. Slave bins were not used, but are now.

A trial to 2,400 properties was introduced in 2002 for a fortnightly kerbside collection of cardboard, aluminium and steel cans, green, brown and clear glass and plastic bottles and textiles. The materials were sorted into a stillage vehicle at the kerbside. After a few months of operating the trial the collection of plastic was discontinued because of capacity issues in the box. Newspapers were collected separately.

These collections, together with a network of around 80 bring banks enabled BDC to achieve a recycling rate of 11.38% in 2003/04 and a composting rate of 7.48%.

### Collections funded from Round 2 NWMRF

BDC has been set a statutory recycling target of 30% by 2005/06 and to achieve this it recognised that it would need to expand its paper collection to include other dry recyclables. It applied for Round 2 funding to establish a trial of two collection methods for co-mingled dry recyclables to evaluate which was most suitable for its residents.

## **Kerbside Recycling Experiences**

In one trial, 6,000 residents were provided with 55L boxes and in the other trial a further 6,000 residents were provided with pink single-use 75L sacks. Both collections targeted cardboard, directories (including yellow pages), plastic bottles, food and drink cans, aerosols, foil, and plastic bags. The boxes and sacks were collected fortnightly from the kerbside using refuse freighters and the co-mingled materials taken to Rainham MRF for sorting. Residents were asked to continue placing newspapers and magazines into carrier bags next to the pink sacks for collection at the same time. Similarly, textiles were also targeted, but residents were asked to put them into a separate bag with a special sticker (provided) indicating that the bag contained textiles. These were collected in the same vehicle but kept separate from the other materials.

The 6,000 properties provided with boxes did not receive the glass collection. Of the 6,000 trialling the plastic sacks, the 2,400 that had been part of the earlier pilot collecting dry recyclables using boxes, were asked to now use their boxes for glass only. Four roads (239 properties) were already on the glass collection introduced in June.

The refuse collection remained weekly throughout the district.

### **Roll-out of the collection**

The 12,000 properties represented one collection round, 6,000 properties served each week. All the households received their containers at the same time and the collections commenced in September 2003.

The Round 2 funding allowed for the employment of a Projects Officer, a collection crew and a research consultant (to carry out participation monitoring and make a comparison of the two types of receptacles being used for collection).

### **Communications and promotion of the collection**

BDC produced 2 Newsletters during the 8 months roll out period. The authority also carried out monitoring for contamination and undertook a door knocking campaign including using a variety of postcards. This was carried out in conjunction with the collection crews, who were issuing contamination stickers.

BDC also created display boards to describe the process that the co-mingled collections go through for sorting and reprocessing which was used in an exhibition trailer.

The collection vehicles were specially liveried with BDC's 'Pink' scheme logos and the authority worked with the press to ensure coverage of scheme launch in local papers.

A couple of weeks before the collections started residents were sent a leaflet explaining that their recycling collections were going to change.

For some residents this simply meant changing from the paper only collection to the multi-material collection (using a different coloured sack or a new box) and a paper collection.

The containers were delivered with an accompanying leaflet detailing the materials targeted and the collection calendar.

In December 2003 a Newsletter that contained hints and tips on what to recycle and information on the success of scheme was provided to the residents on the trial. A survey questionnaire was also included with a prize draw to encourage responses. Approximately 11% were returned.

In March 2004 a further Newsletter was delivered to residents providing feedback on the survey. It also explained that the trial had been successful and would continue and all residents would receive sacks to use in place of the boxes (and that the boxes would be used for glass). Finally, the Newsletter informed residents that all 12,000 properties would soon receive the separate collection of glass using the boxes, with the collection being rolled-out over 12 months.

### Performance of the collection

In the first 6 months of the collection 791 tonnes were collected from the 12,000 households, equivalent to 131 kg/household/yr (including the newspapers and magazines previously collected). In 2004/05 1,618 tonnes were collected, equivalent to 135 kg/household/yr.

Participation in the scheme, measured by carrying out a box count, suggested that 75% of residents provided with boxes were recycling compared to 70% of residents provided with sacks. However, the quantity of material collected in the sacks was higher at an average of 8.22kg per household compared to an average of 7.15kg per household with a box. (Data from Composition Analysis carried out by Network Recycling, Feb 2004). Contamination was not a major problem in either collection and if found, crews would issue stickers and not collect contaminated boxes or bags.

The collections ran in the trial areas for 18 months between September 2003 and March 2005. In April 2005 the collection was expanded to an additional 24,000 households at a rate of 9000 properties each week using the pink sacks.

### Standard collection costs

It is difficult to compare collection costs between authorities for many reasons including contracting out versus in-house service, lease versus purchase of capital equipment, accounting practices, etc. Therefore, for the purpose of the case study analysis, Kerbside Analysis Tool (KAT) has been used to estimate a standardised cost for each collection. It should be stressed that the use of KAT is to overcome difficulties in comparing a service that is operated and paid for in a number of different ways across authorities and not as a reflection of perceived inaccuracies in the audited or declared costs for individual authorities.

KAT uses information on the infrastructure actually employed to carry out the collection, for example the number and type of vehicles, and applies a unit cost, uniform depreciation and financing. **The standard costs calculated by KAT are not the same as the price paid to a contractor for operating the service or the same as the costs that appear in the audited accounts of the authority.** However, they enable a fair comparison between authorities of the costs of running kerbside collections.

Standard costs have been estimated for all the kerbside collections operating in the authority including refuse collection, regardless of if they were funded by Round 2 or not. It is sometimes impossible to separate out the elements funded by Round 2, for example if it only covered part of a collection or if it replaced an existing collection. Therefore, the cost analysis can only be undertaken at an authority wide level. Refuse collection costs are included as well as those for recyclables collection because it provides a useful base reference against which to compare the costs of the recyclables collections, refuse collection costs not being uniform over the country.

## Kerbside Recycling Experiences

The cost analysis is for the financial year 2004/05 and can therefore be directly related to the performance above.

The standard collection costs for the refuse and kerbside collections in BDC are presented in Table 1. All the costs are **gross**, i.e. do not include any benefits from the sales of materials or from the receipt of recycling credits if payable.

**Table 1:** KAT standard gross collection costs for household waste collected at the kerbside

Collected stream	Round 2 funding	Total households served	Collection frequency	Tonnes collected 04/05 (T)	Collection cost per tonne (£)	Collection cost per household (£)
Refuse	–	72,000	Weekly	62,665	24	21
Paper	–	51,500	Fortnightly	2,964	111	6
Co-mingled dry	for 12,000 households (6,000 sacks, 6,000 boxes)	12,000	Fortnightly	1,618	86	12
Glass	–	20,000	Fortnightly	1,231	132	8
Green	–	45,000	Fortnightly	4,471	132	13
<b>Total</b>	–	<b>72,000</b>	–	<b>73,952</b>	<b>37</b>	<b>38</b>

When considering the costs presented in Table 1 it is essential to remember that they cover the collection of household waste/recyclables only, i.e. trade waste is not included, and additional costs for spare vehicles, depots and other support costs relating to collection are not included. Post collection costs, such as gate fees for refuse, MRF processing and composting, and ancillary costs such as for promotion, education, call centres and communications are also not included. Depending on the extent of these facilities and activities, and also the level of recycling credits or sales revenues, the standard KAT cost may be lower or higher than the audited accounts and a direct comparison is impossible with BVPI 86.

### Lessons learnt

Overall, Officers believe that the trial was successful and well received by residents. There are a number of reasons for the success, including:

- the promotion and information campaign that went out to residents;
- the Projects Officer accompanying the crew at the start to ensure the smooth running of the collection;
- the high levels of participation in an area that is difficult to get public engagement; and
- the sacks are easy to use by residents and therefore popular.

Some of the less positive aspects of the collection are:

- being unable to carryout district-wide promotion on a large scale as the collection was only to a trial area;
- the legacy of different schemes in different areas and changes to collections making the change to a common collection difficult for residents and difficult to communicate;
- the initial crews used for the collections were not as efficient as they could have been (rounds have been increased from 12,000 to 18,000 in the expansion); and
- lack of Member Support towards options to restrict the quantity of refuse collected, for example, limiting the number of sacks or moving to alternate week collections and also the local perceived need for weekly recyclables collections as householders are not used to storing recyclables for a fortnight.

## **Developments following the Round 2 funding**

### **Expansion of the co-mingled collections**

In April 2005 an additional 24,000 properties were added onto the scheme and the intention is to achieve a district wide coverage by April 2006. Initial indications suggest that the collections are being well received but that participation is slightly lower than in the trial areas.

### **Expansion of the glass collection**

In April 2005 a further 48,000 properties were added to the glass collection, bringing the total number of households on this scheme to 68,000.